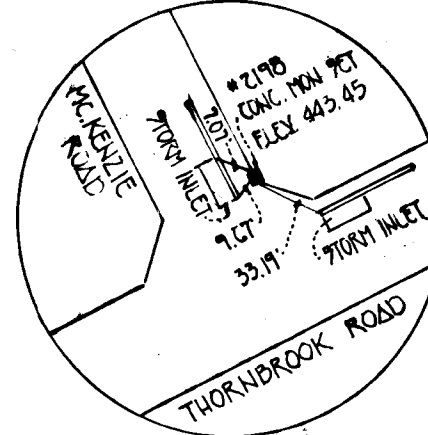


PLAN	SURVEYED _____	BY _____	DATE _____
	PLOTTED _____ ALIGNMENT CHECKED _____ RT. OF WAY CHECKED _____		
NOTE BOOK NO. _____			

- | | |
|--|---|
| <p>APPROVED _____
DEPARTMENT OF PUBLIC WORKS</p> <p><i>Edna Damann</i> _____ <i>6/26/91</i>
CHIEF, LAND ACQUISITION & ACQUISITION</p> <p><i>Eraville W. Welland</i> _____ <i>8/2/91</i>
CHIEF, BUREAU OF HIGHWAYS DATE</p> | <p>APPROVED _____
DEPARTMENT OF PUBLIC WORKS</p> <p><i>Edna Damann & Edna</i> _____ <i>9-23-91</i>
CHIEF, BUREAU OF ENGINEERING DATE</p> <p><i>Edna</i> _____</p> |
| <p>APPROVED _____
DEPT. OF PLANNING AND ZONING</p> <p><i>Edna Hilbornath</i> _____ <i>9/6/91</i>
CHIEF, COMMUNITY PLANNING DATE
AND LAND DEVELOPMENT <i>com</i></p> | <p>APPROVED _____
DEPT. OF PLANNING AND ZONING</p> <p><i>Edna Hilbornath</i> _____ <i>9/6/91</i>
CHIEF, COMMUNITY PLANNING DATE
AND LAND DEVELOPMENT <i>com</i></p> |

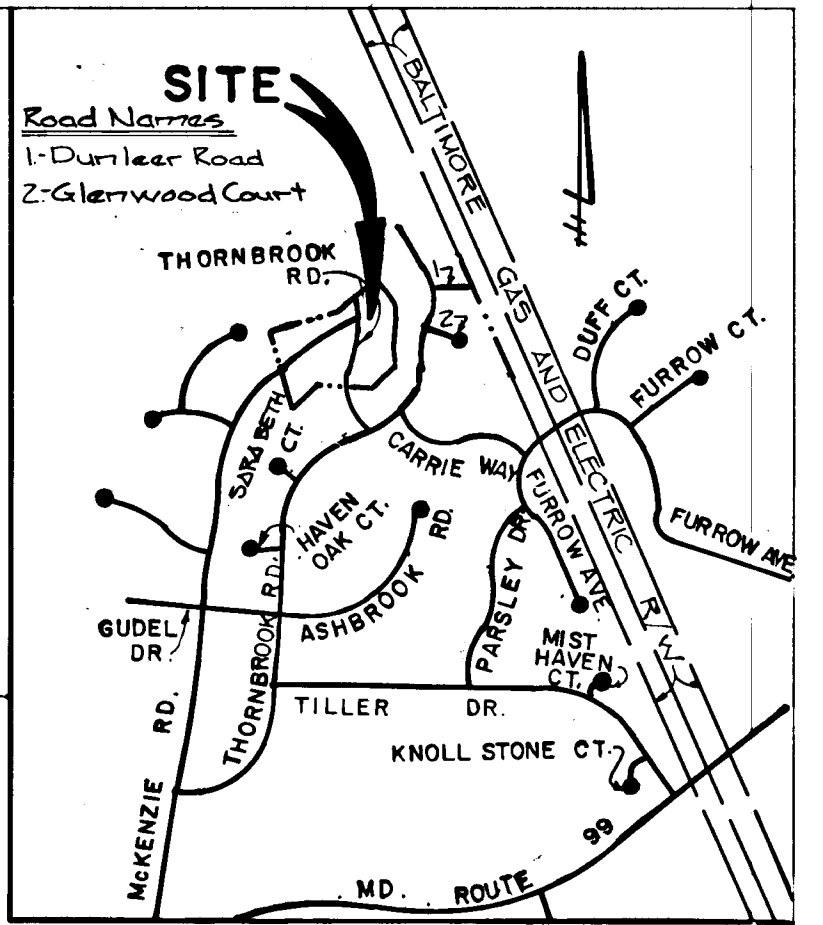
1. Southwest Intersection Of McKenzie Road And Thornbrook Road.
2. McKenzie Road @ Sta. 13+70 On The East Side
3. Thornbrook Road @ Sta. 3+75 On The West Side.

BM. 1000 Elev. 407.81
Rebar Set 27'± Southeast Of Linear Profile
Sta. 1+55 Glenwood Court On Lot 45.
BM. 2000 Elev. 423.62
Rebar Set 91'± North Of E. Sta. 2+00
Dunleavy Road On Lot 36
*For Locations, See Sheet 3 Of Mt. Hebron
Section 20 - F20-???

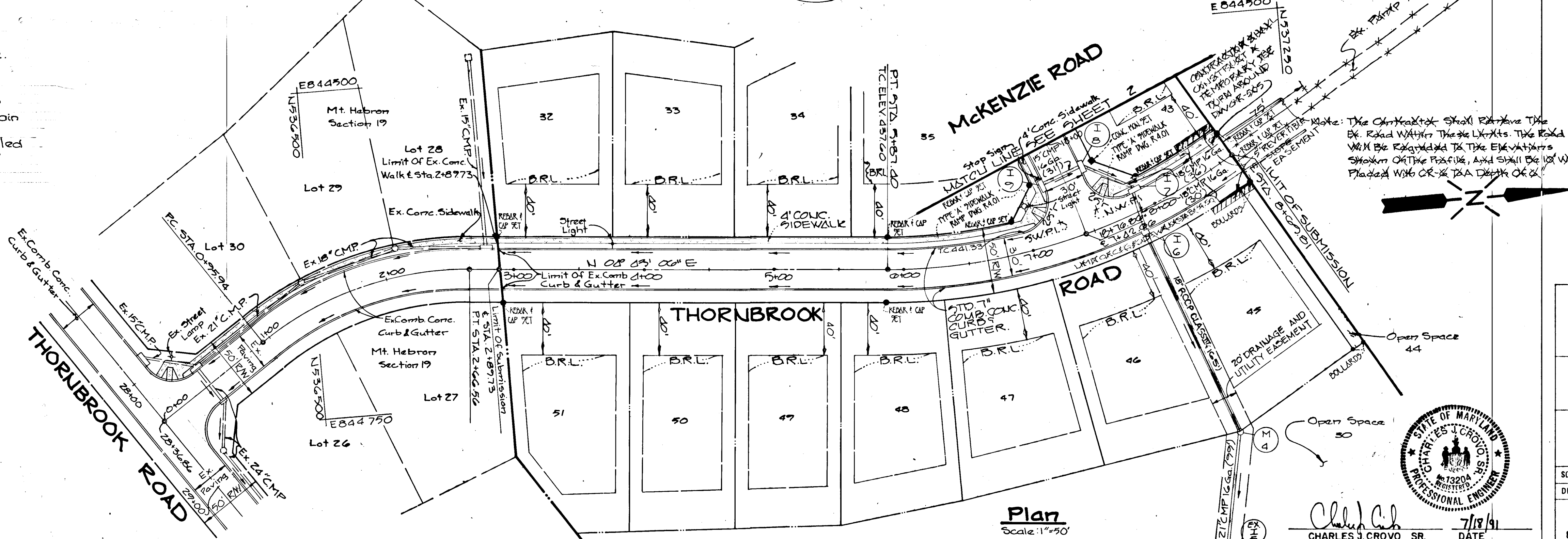


STATION DATA
STA. 5+87.40 TO STA. 7+42.66
R=440.00'
L=155.26'
 $\Delta=20^{\circ}13'06''$
T=78.45'
CHD. N05°23'27"W 154.46'

STA. 5+87.40 TO STA. 8+69.81
R=440.00'
L=282.41'
 $\Delta=36^{\circ}46'30''$
T=146.26'
CHD. N1340'09"W, 277.59'



VICINITY MAP
SCALE 1"=1200'



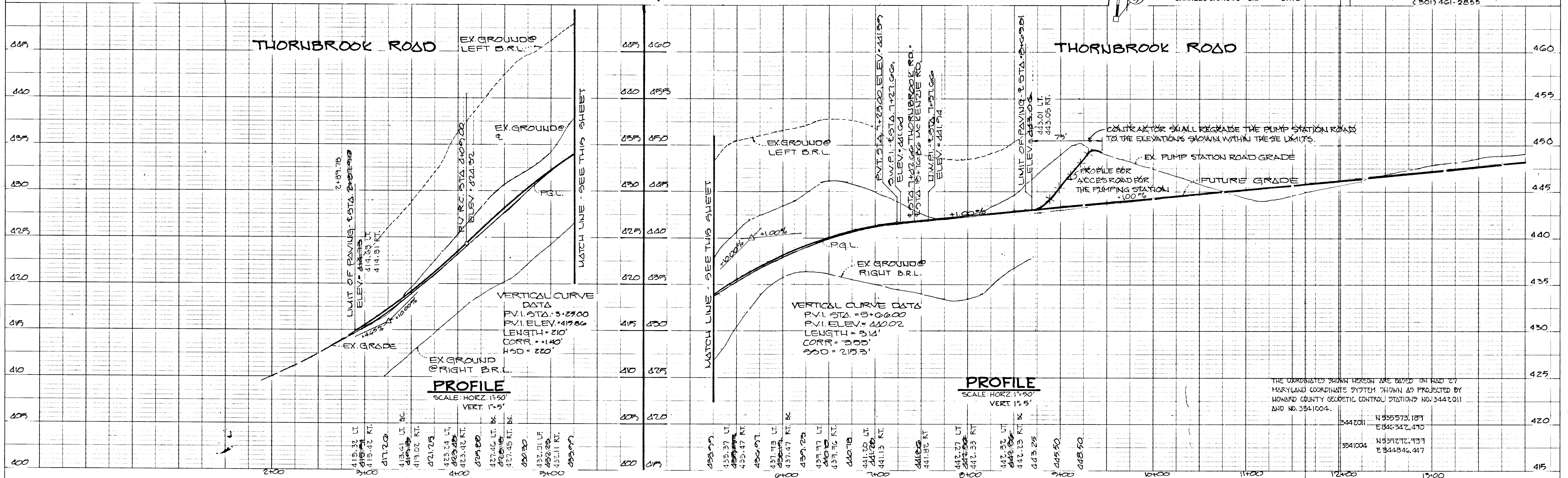
Plan
Scale: 1" = 50'

CHARLES J. CROVO SR. 7/18/91

MT. HEBRON
SECTION 20 PHASE II
LOTS 32-51
2ND. ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

THORNBROOK ROAD
PLAN & PROFILE

OWNER AND DEVELOPER MT. HEBRON INC.		
2106 MT. HEBRON DRIVE ELLICOTT CITY, MARYLAND 21043		
SCALE As Shown	DATE JULY 18, 1971	DWG. NO. 1 OF 3
DES. R. Isaacs	DRN. M. Young	CHK. C. Crovo
FISHER, COLLINS AND CARTER, INC. CIVIL ENGINEERS AND LAND SURVEYORS 8368 COURT AVE. ELLICOTT CITY, MARYLAND 21043 (301) 461-2833		



THE COORDINATES SHOWN HEREON ARE BASED ON NAD 27
MARYLAND COORDINATE SYSTEM SHOWN AS PROJECTED BY
HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 3442011
AND NO. 3441004.

7-20-95 F92-11

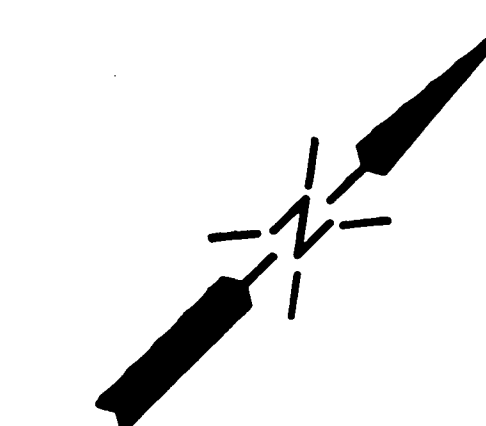
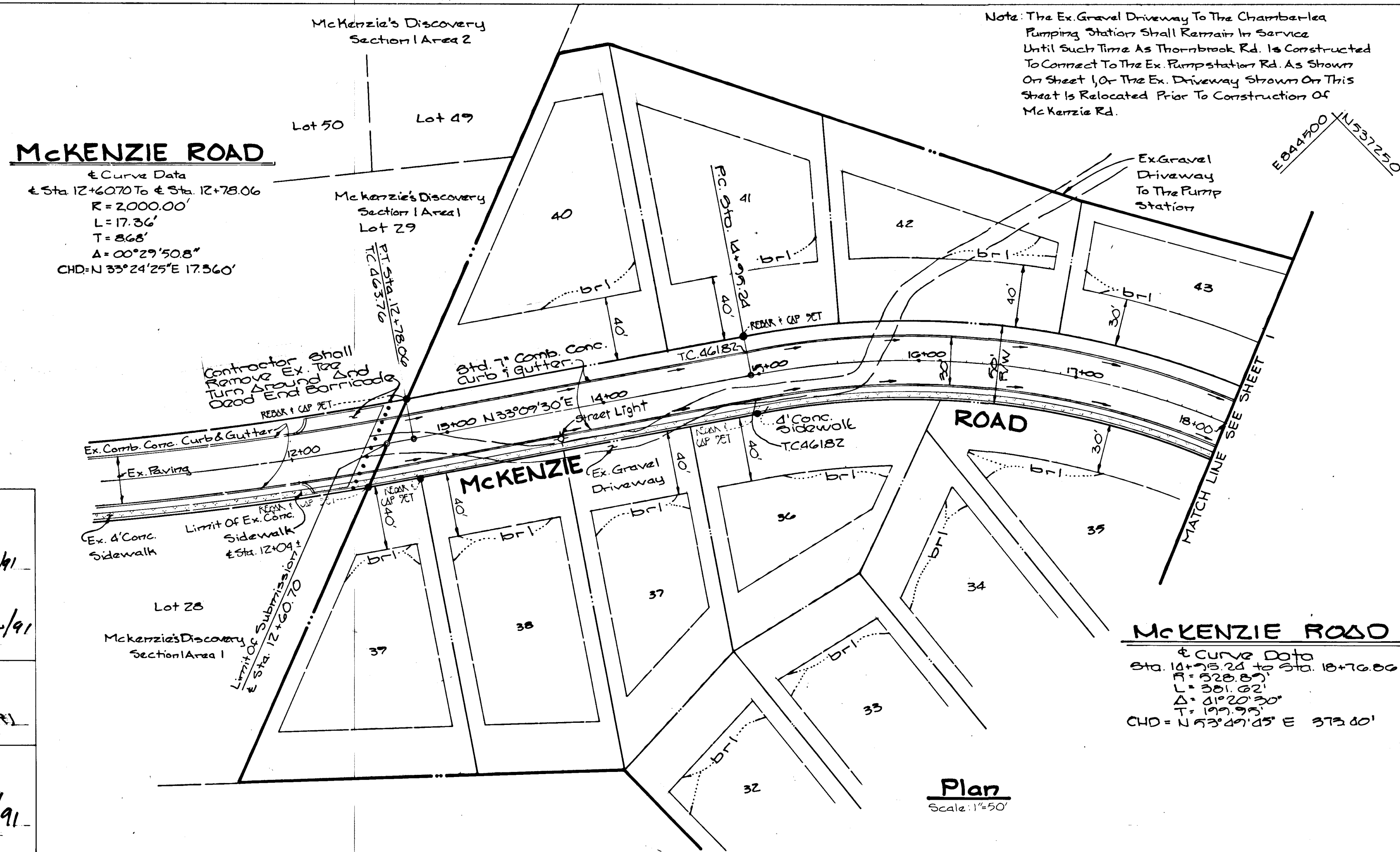
PLAN	DATE	BY
NOTE BOOK	DATE	BY

APPROVED
DEPARTMENT OF PUBLIC WORKS
[Signature] 8/20/91

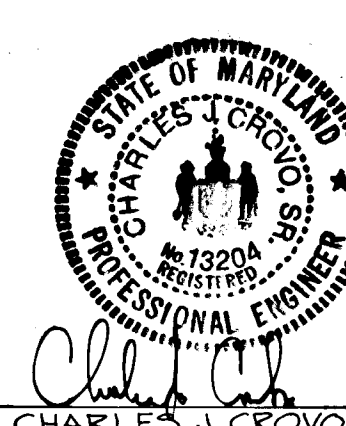
APPROVED
DEPARTMENT OF PUBLIC WORKS
[Signature] 8/2/91

APPROVED
DEPT. OF PLANNING AND ZONING
[Signature] 9/6/91

PROFILE	DATE	BY
NOTE BOOK	DATE	BY



1237240
E864750



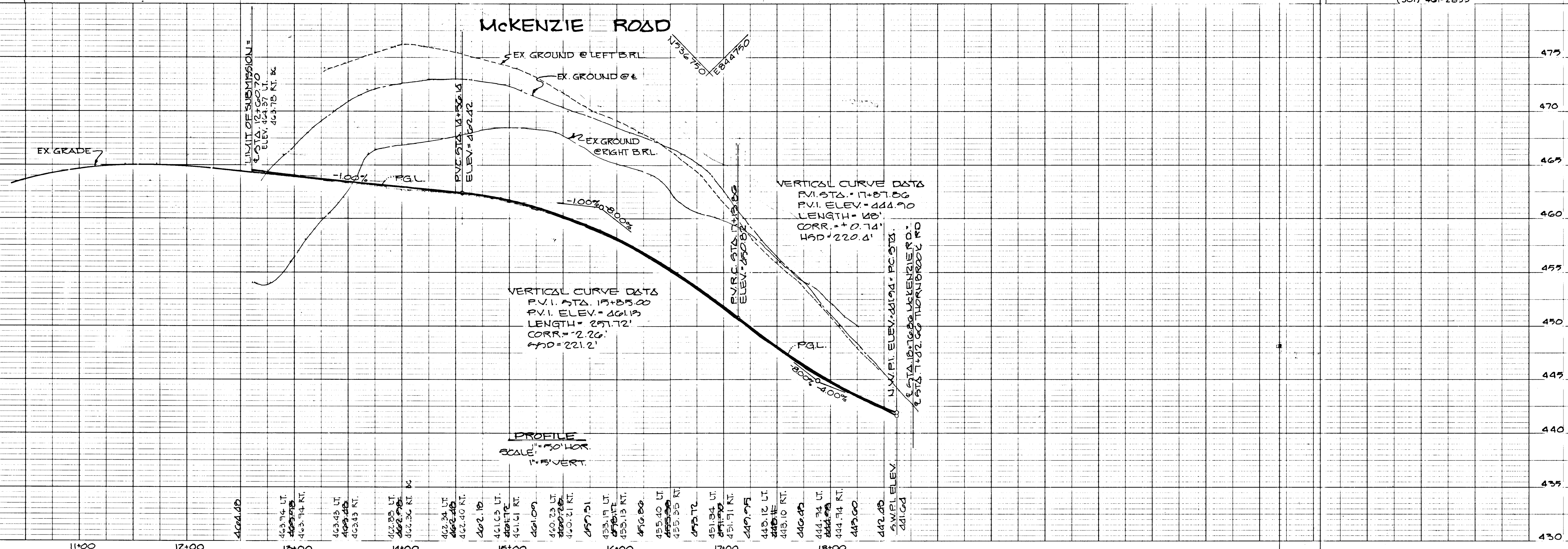
Mt. Hebron
SECTION 20 PHASE II
Lots 32-41
2ND Election District
Howard County, Md.

McKENZIE ROAD
PLAN & PROFILE

OWNER AND DEVELOPER
Mt. Hebron Inc.
2106 Mt. Hebron Drive
Ellicott City, Maryland 21043

SCALE As Shown DATE JULY 18, 1991 DWG. NO. 2 OF 5
DESIGNED BY DESIGNED BY DRN M. Young CHK C. Crovo

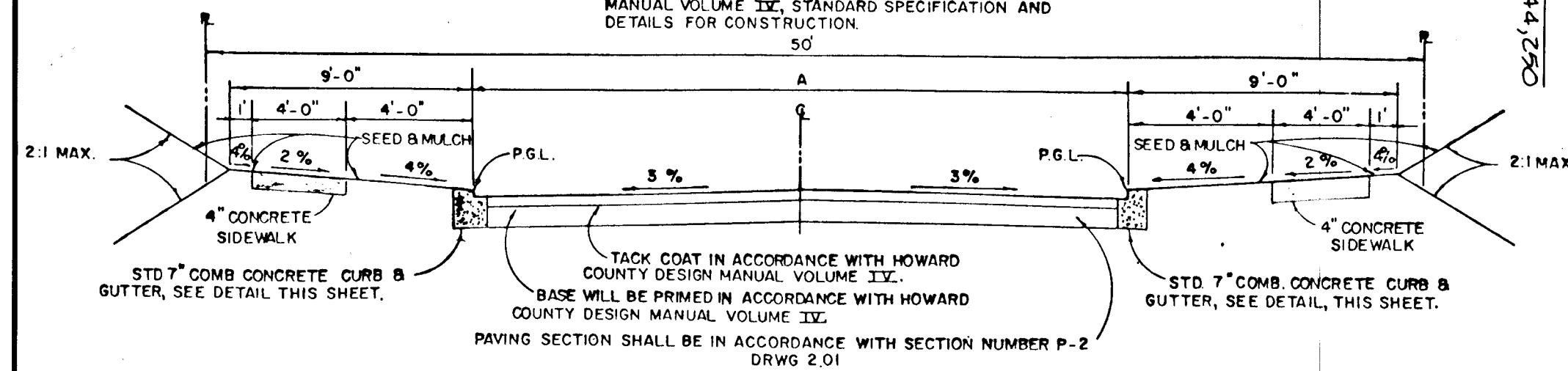
FISHER, COLLINS AND CARTER, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
8388 COURT AVE. ELICOTT CITY, MARYLAND 21043
(301) 461-2855



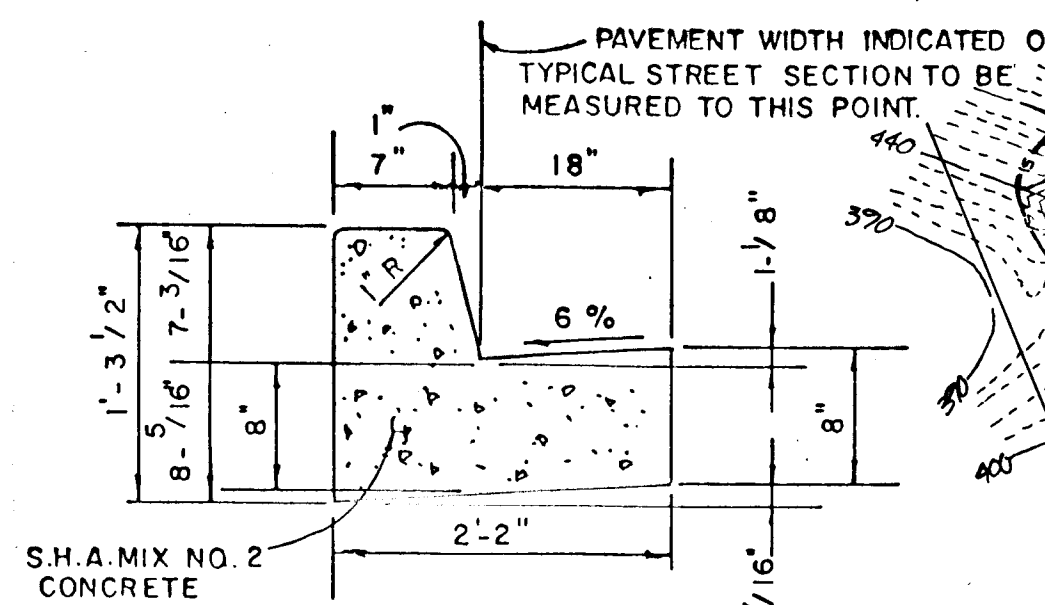
STRUCTURE SCHEDULE							
STRUCTURE	TOP ELEV.	INV. IN.	INV. OUT.	ROAD	ROAD STATION	TYPE	REMARKS
I-6	442.20	435.88	435.63	THORNBROOK RD.	7+84.18	A-5	S.D.-4.01
I-7	442.24	437.17	436.92	THORNBROOK RD.	7+88.50	A-10/W	S.D.-4.02 & S.D.-4.83
I-8	443.30	438.05	438.60	MCKENZIE RD.	18+31.00	A-10/W	S.D.-4.02 & S.D.-4.83
I-9	443.30	438.05	438.60	MCKENZIE RD.	18+31.00	A-10/W	S.D.-4.02 & S.D.-4.83
M-4	418.20	407.50	407.33			STD. 4"	G-501
						MANHOLE	

TYPICAL ROADWAY SECTION

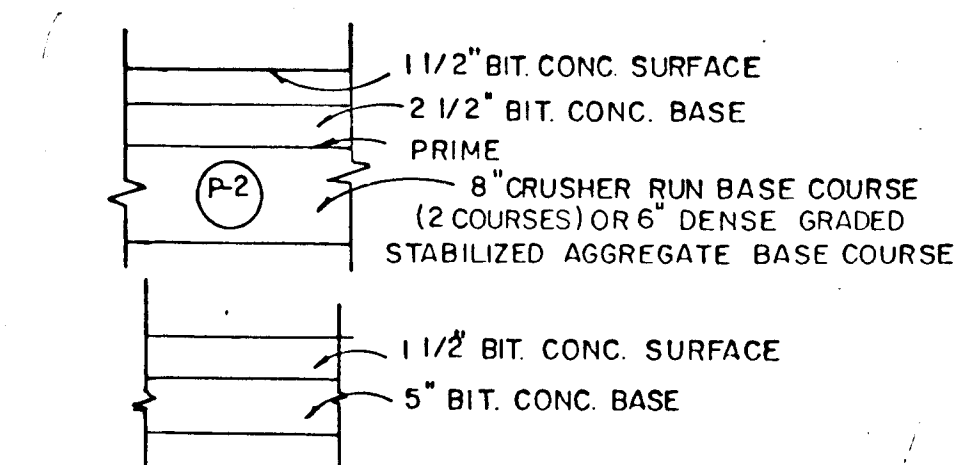
NO SCALE
ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL VOLUME IX, STANDARD SPECIFICATION AND DETAILS FOR CONSTRUCTION.



ROAD NAME	CLASSIFICATION	DESIGN SPEED	ZONING	STA. LIMITS	A
MCKENZIE ROAD	LOCAL ROAD	30 MPH	R-20	12+60 TO 18+75	30'
THORNBROOK ROAD	LOCAL ROAD	30 MPH	R-20	2+87 TO 8+67.81	30'

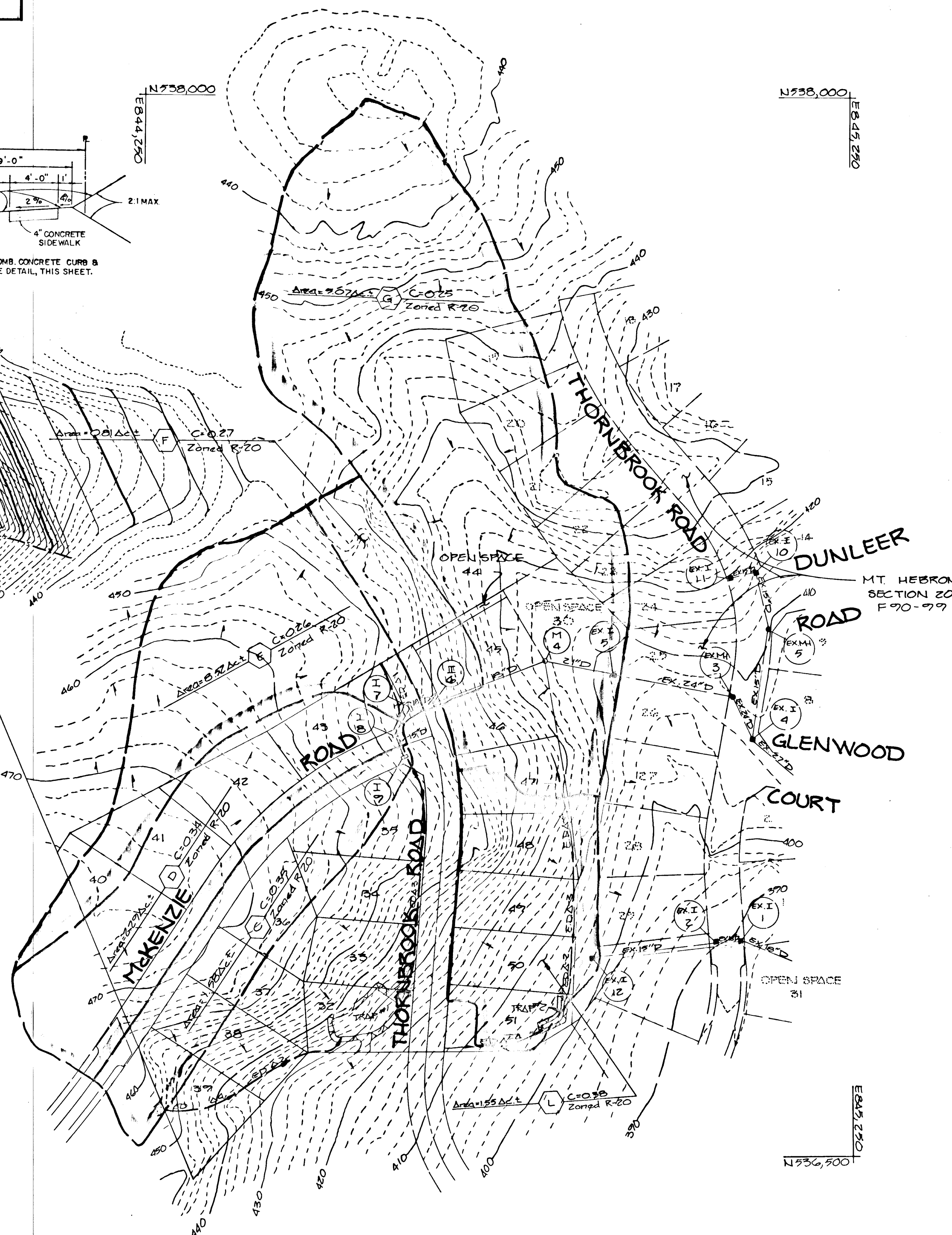


STANDARD 7" COMB. CONC. CURB & GUTTER



PAVING SECTION P-2

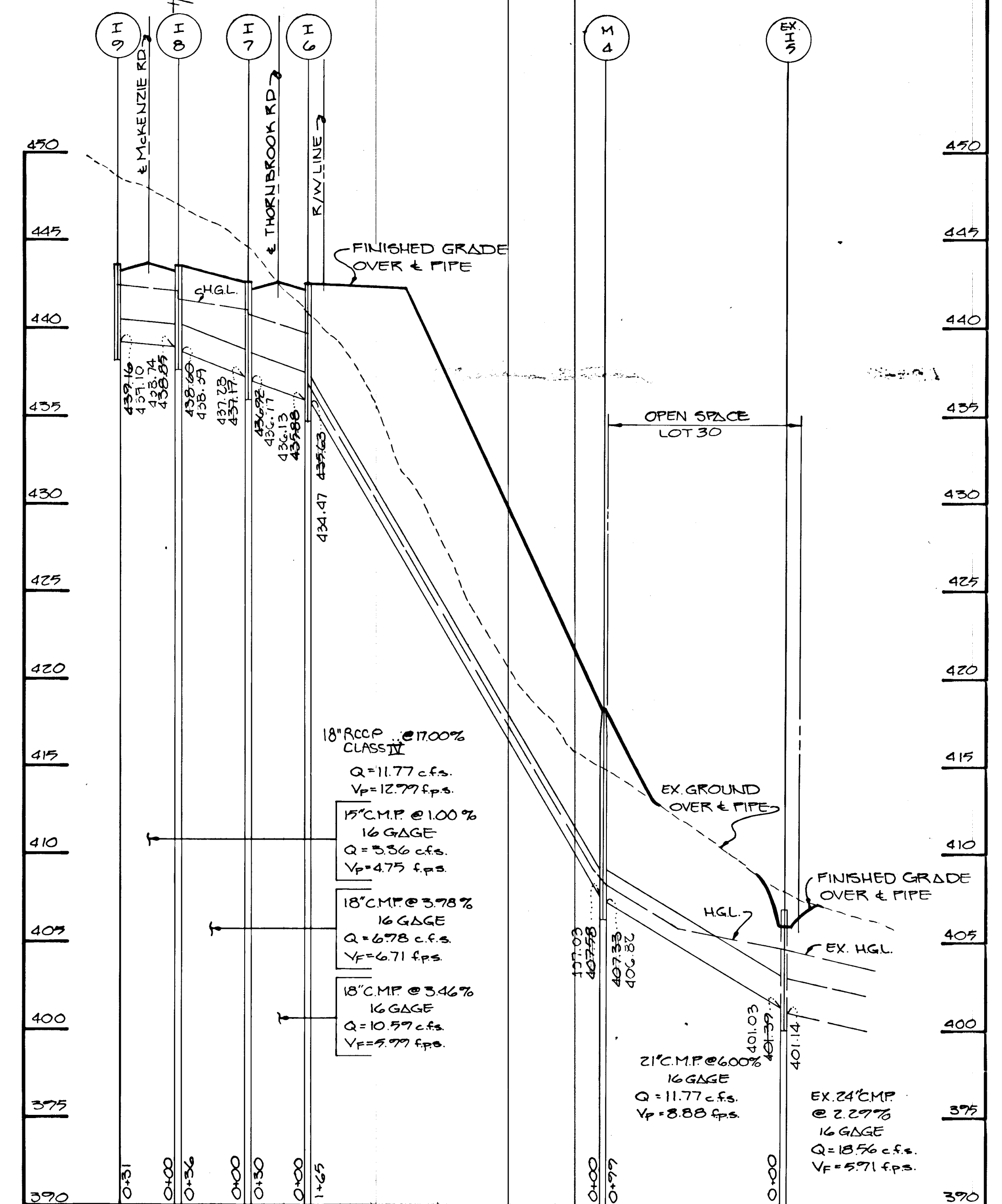
NO SCALE



NOTE: ED. Δ1 - EARTH DIKE & TREATMENT TYPE

PLAN

SCALE: 1"=100'



STORM DRAIN PROFILE

SCALE: 1"=5' VERT.
1"=50' HOR.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Land Development Division *Howard County* Date *8/2/91*

Chief, Bureau of Highways *Howard County* Date *8/2/91*

Chief, Bureau of Engineering *Howard County* Date *8/2/91*

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Community Planning and Land Development *Howard County* Date *9/6/91*

FISHER, COLLINS & CARTER, INC.

CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
SUITE 100, 9171 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043
(301) 461-2855

OWNER AND DEVELOPER
MT. HEBRON INC.
2106 MT. HEBRON DRIVE
ELLICOTT CITY, MARYLAND 21043



Drainage Area Map
Mt. Hebron
SECTION 20, PHASE II
Lots 32-51
2nd Election District Scale 1"=100'
Howard County, Md. July 18, 1991
Sheet 5 of 5

CONSTRUCTION SEQUENCE

1. OBTAIN GRADING PERMIT.
2. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE, SEDIMENT TRAP, EARTH DIKE, AND STORMWATER MANAGEMENT FACILITIES.
3. CLEAR AND GRUB SITE TO LIMITS OF DISTURBANCE.
4. GRADE ROADS TO SUBGRADE.
5. CONSTRUCT STORM DRAINS.
6. THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON, AFTER EACH RAINFALL AND ON A DAILY BASIS.
7. SEDIMENT SHALL BE REMOVED FROM TRAP WHEN CLEANOUT ELEVATION HAS BEEN REACHED TRAP SHALL BE DEWATERED BY PUMPING SEDIMENT SHALL BE PLACED UP HILL FROM SITE.
8. REMOVE SEDIMENT FROM EX-ROADWAYS AND DRESS STONE CONSTRUCTION ENTRANCE AS REQUIRED.
9. CONSTRUCT ALL UTILITIES.
10. INSTALL CURB AND GUTTER AND SUB-BASE ON ROADS.
11. REMOVE STONE CONSTRUCTION ENTRANCE, CLEAN BASE COURSE, APPLY TACK COAT AND LAY SURFACE COURSES.
12. ALL DISTURBED AREAS DUE TO REMOVAL OF SEDIMENT CONTROL MEASURES SHALL BE GRADED AND STABILIZED BY PERMANENT SEEDING.
13. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN a) 7 CALENDAR DAYS FOR PERIMETER SEDIMENT CONTROL STRUCTURES, SLOPES GREATER THAN 3:1; b) 14 DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
14. COMPLETE STABILIZATION OF ALL DISTURBED AREAS SHALL BE DONE PRIOR TO REMOVAL OF ALL SEDIMENT CONTROLS.
15. NOTIFY HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS FOR FINAL INSPECTION AT DURATION OF PROJECT (301) 792-7272.

SEDIMENT TRAP DATA NO. 3

1. TYPE = RIP-RAP OUTLET SEDIMENT TRAP
2. DRAINAGE AREA = 5.30 AC.±
3. VOLUME REQUIRED = 353 CU.YD.
4. VOLUME PROVIDED = 357 CU.YD.
5. TOP DIM. = 100' X 36'
6. BOTTOM DIM. = 94' X 30'
7. WEIR CREST ELEVATION = 393.25
8. BOTTOM ELEVATION = 389.25
9. CLEANOUT ELEVATION = 390.75
10. DEPTH = 3.0'
11. SIDE SLOPES = 1:1
12. 'L' = 14.0'

SEDIMENT TRAP DATA NO. 2

1. TYPE = STONE OUTLET SEDIMENT TRAP
2. DRAINAGE AREA = 2.36 AC.±
3. VOLUME REQUIRED = 158 CU.YD.
4. VOLUME PROVIDED = 165 CU.YD.
5. TOP DIM. = 90' X 20'
6. BOTTOM DIM. = 84' X 14'
7. WEIR CREST ELEVATION = 403.00
8. BOTTOM ELEVATION = 399.0
9. CLEANOUT ELEVATION = 400.50
10. DEPTH = 3.0'
11. SIDE SLOPES = 1:1
12. 'L' = 10.0'

NOTE: THIS FILL AREA IS LOCATED ON THE PROPERTY OWNERS LAND. SEE SHEET 3 FOR LOCATION.

FISHER, COLLINS & CARTER
CONSULTING ENGINEERS AND LAND SURVEYERS
507 E. BALTIMORE NATIONAL PIKE
FELICITY CITY, MARYLAND 21043
TELEPHONE: (301) 461-2855

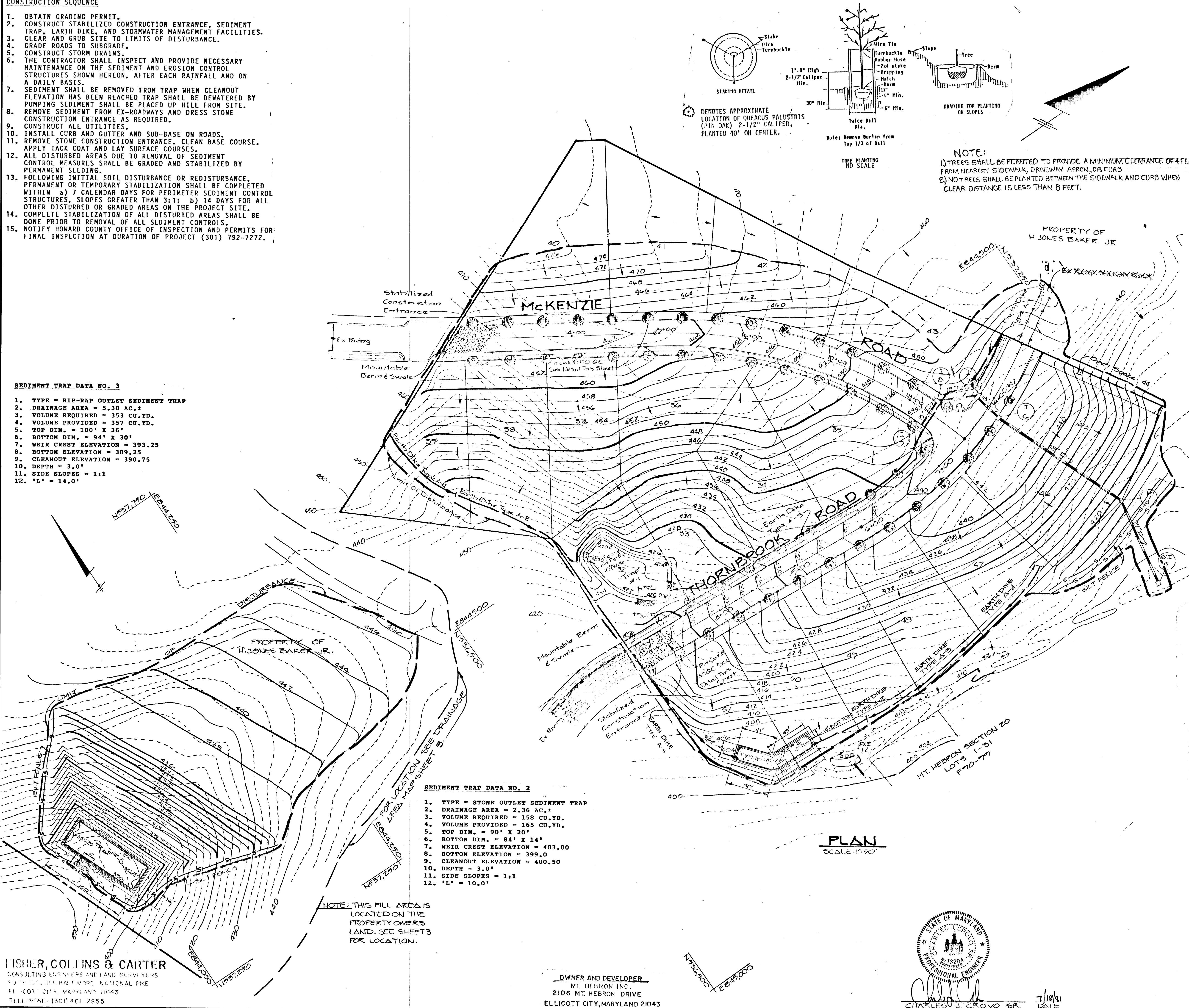
OWNER AND DEVELOPER
MT. HEBRON INC.
2106 MT. HEBRON DRIVE
ELLICOTT CITY, MARYLAND 21043

STARTING DETAIL
LOCATES APPROXIMATE LOCATION OF QUERCUS PALUSTRIS (PIN OAK) 2-1/2" CALIPER, PLANTED 40' ON CENTER.

NOTE: REMOVE BURLAP FROM TOP 1/3 OF BALL
TREE PLANTING NO SCALE

NOTE:

- 1) TREES SHALL BE PLANTED TO PROVIDE A MINIMUM CLEARANCE OF 4 FEET FROM NEAREST SIDEWALK, DRIVEWAY APRON, OR CURB.
- 2) NO TREES SHALL BE PLANTED BETWEEN THE SIDEWALK AND CURB WHEN CLEAR DISTANCE IS LESS THAN 8 FEET.



PLAN
SCALE 1\"/>



CHARLES J. CROVO SR.
7/18/91
DATE

ENGINEER'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF ENGINEER
7/18/91
DATE

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

SIGNATURE OF DEVELOPER
7/18/91
DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

JANET M. HELM / JMH
DIST. SOIL CONSERVATION DISTRICT
7/31/91
DATE

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

JOHN R. ROBERTSON
DISTRICT HOWARD SOIL CONSERVATION DIST.
7/31/91
DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

EMMA J. HILGUTH
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
9/6/91
DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS

KEITH A. BROWN
CHIEF, BUREAU OF ENGINEERING
9/2/91
DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS

FRANCIS W. WELCHAND
CHIEF, BUREAU OF HIGHWAYS
8/2/91
DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS

DAVID D. DUNN
CHIEF, LAND DEVELOPMENT DIVISION
8/30/91
DATE

SEDIMENT TRAP DATA NO. 1

1. TYPE = STONE OUTLET SEDIMENT TRAP
2. DRAINAGE AREA = 4.97 AC.±
3. VOLUME REQUIRED = 331 CU.YD.
4. VOLUME PROVIDED = 377 CU.YD.
5. TOP DIM. = 75' X 50'
6. BOTTOM DIM. = 69' X 44'
7. WEIR CREST ELEVATION = 424.00
8. BOTTOM ELEVATION = 420.00
9. CLEANOUT ELEVATION = 421.50
10. DEPTH = 3.0'
11. SIDE SLOPES = 1:1
12. 'L' = 20.0'

NOTE: CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND UTILITIES PRIOR TO DIGGING. FINAL LOCATIONS OF TREES MAY BE ADJUSTED SLIGHTLY TO ACCOMMODATE FIELD CONDITIONS. PLANTING PROCEDURES SHALL COMPLY WITH "LANDSCAPE SPECIFICATIONS FOR BALTIMORE-WASHINGTON METROPOLITAN AREAS". SUBSTITUTIONS TO THE ABOVE SPECIES MAY BE PERMITTED, PROVIDED THAT THE PLANTING IS IN ACCORDANCE WITH THE STREET TREE AND LANDSCAPE REQUIREMENTS AS SPECIFIED IN SECTION 16.131 OF THE HOWARD COUNTY SUBDIVISION REGULATIONS.

STREET TREE, GRADING AND
SEDIMENT CONTROL PLAN
MT. HEBRON
SECTION 20 PHASE II
LOTS 32-31
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
JULY 18, 1971 SHEET 4 OF 5

PERMANENT SEEDING NOTES:
APPLY TO GRADED OR CLEARED AREA NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE-INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.
SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULE.

- 1) PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ.FT.) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ.FT.) BEFORE SEEDING.
HARROW OR DISC INTO UPPER THREE-INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER 30-0-0 UREAFORM FERTILIZER (9 LBS/1000 SQ.FT.)
- 2) ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ.FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS/1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE-INCHES OF SOIL.

SEEDING: FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS/1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (.05 LBS/1000 SQ.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY: OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WILL ANCHORED STRAW.
MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ.FT.) OR UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.
MAINTENANCE: INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

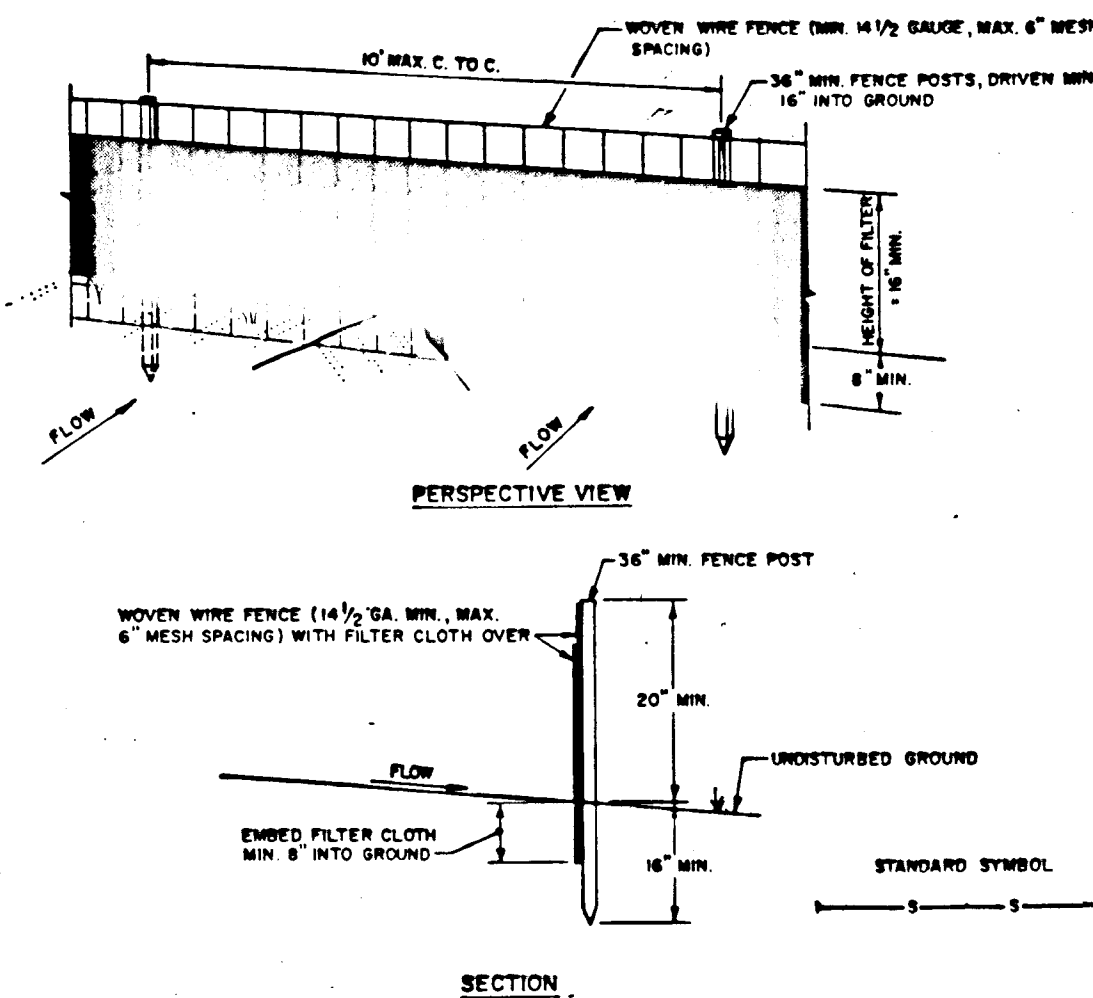
TEMPORARY SEEDING NOTES:
APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE-INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.
SOIL AMENDMENTS: APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ.FT.)
SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15, SEED WITH 2 1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ.FT.). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (.07 LBS/1000 SQ.FT.). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OR USE SOD.
MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES, 8 FT. OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

SEDIMENT CONTROL NOTES

- 1) A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTIONS AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION (992-2437).
- 2) ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- 3) FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL GREATER THAN 3:1. b) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- 4) ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- 5) ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 51) SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- 6) ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- 7) SITE ANALYSIS:
TOTAL AREA OF SITE 8.127 ACRES
AREA DISTURBED 9.739 ACRES
AREA TO BE ROOFED OR PAVED 0.886 ACRES
AREA TO BE VEGETATIVELY STABILIZED 7.097 ACRES
TOTAL CUT 8.000 CU. YDS.
TOTAL FILL 8.000 CU. YDS.
OFFSITE WASTE/BORROW AREA LOCATION 2.527 CU. YDS.
- 8) ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- 9) ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPM SEDIMENT CONTROL INSPECTOR.
- 10) ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.

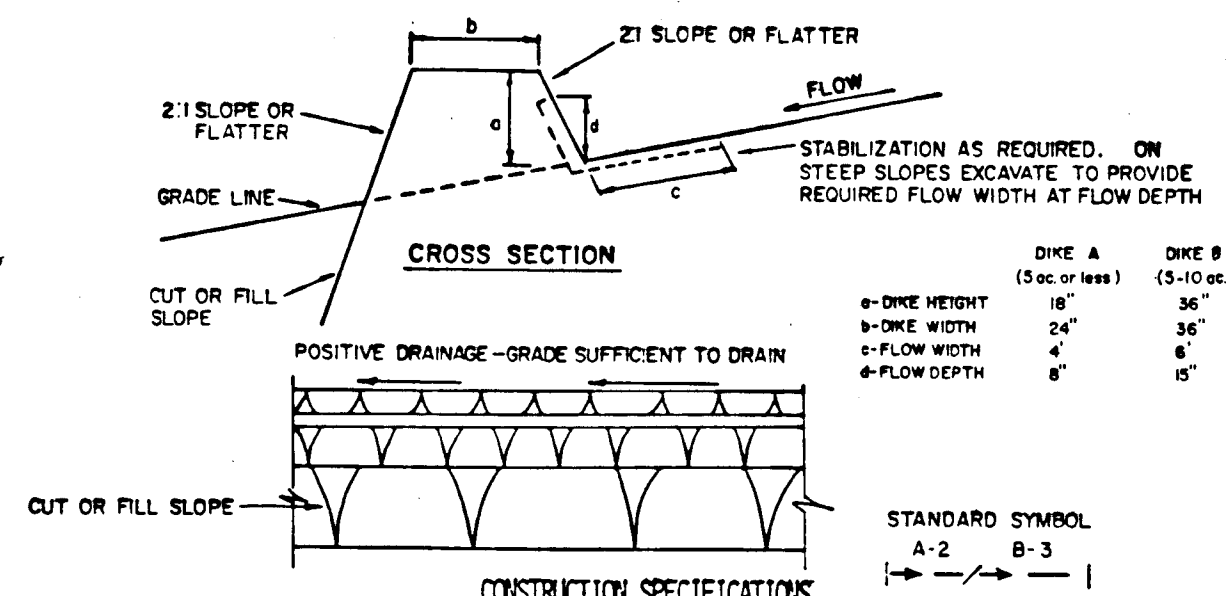


CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
 2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
 4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
- POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD
FENCE: WOVEN WIRE, 14 1/2 GA. 6" MAX. WESH OPENING
FILTER CLOTH: FILTER X, MUFAL, LUNA, STABILINKA LUNA OR APPROVED EQUAL
PREFABRICATED UNIT: GEOPAB, ENVIRONMENT, OR APPROVED EQUAL

SILT FENCE

NOT TO SCALE



1. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
6. STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SEASON; (B) FLOW CHANNEL AS PER THE CHART BELOW.

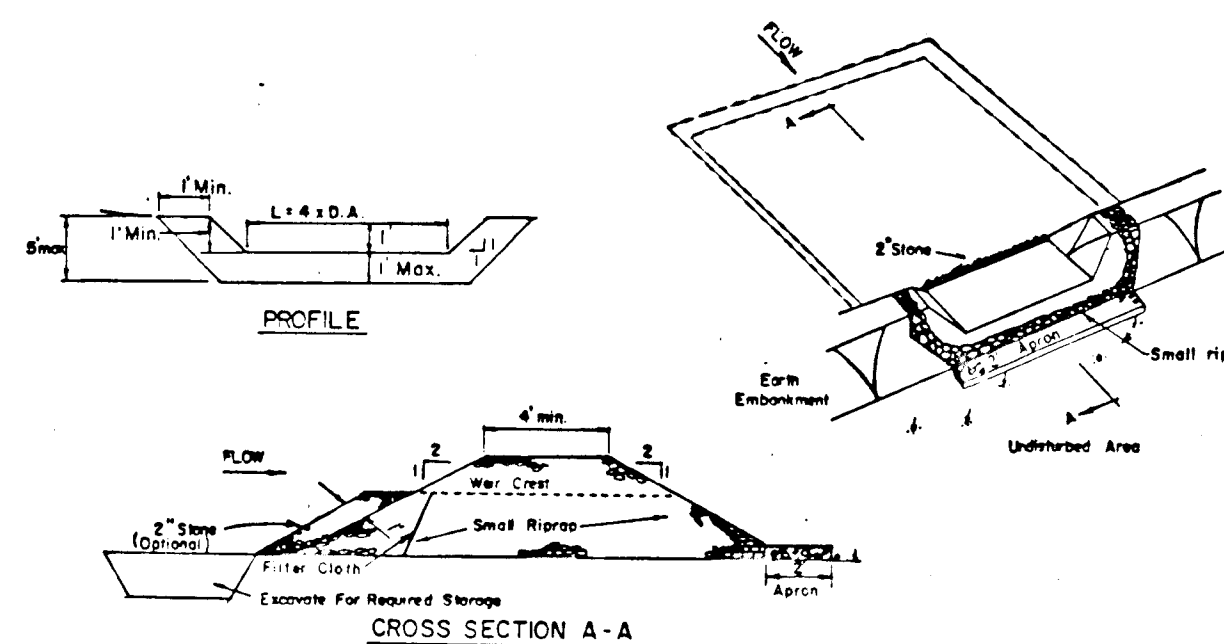
FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE, OR EXCELSTOR; SOD; 2" STONE
3	5.1-8.0%	SEED WITH JUTE, OR SOD; 2" STONE	LINED RIP-RAP 4-8"
4	8.1-20%	LINED RIP-RAP 4-8"	ENGINEERING DESIGN

A. STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.
B. RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND PRESSED INTO THE SOIL.
C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.
7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

EARTH DIKE

NOT TO SCALE



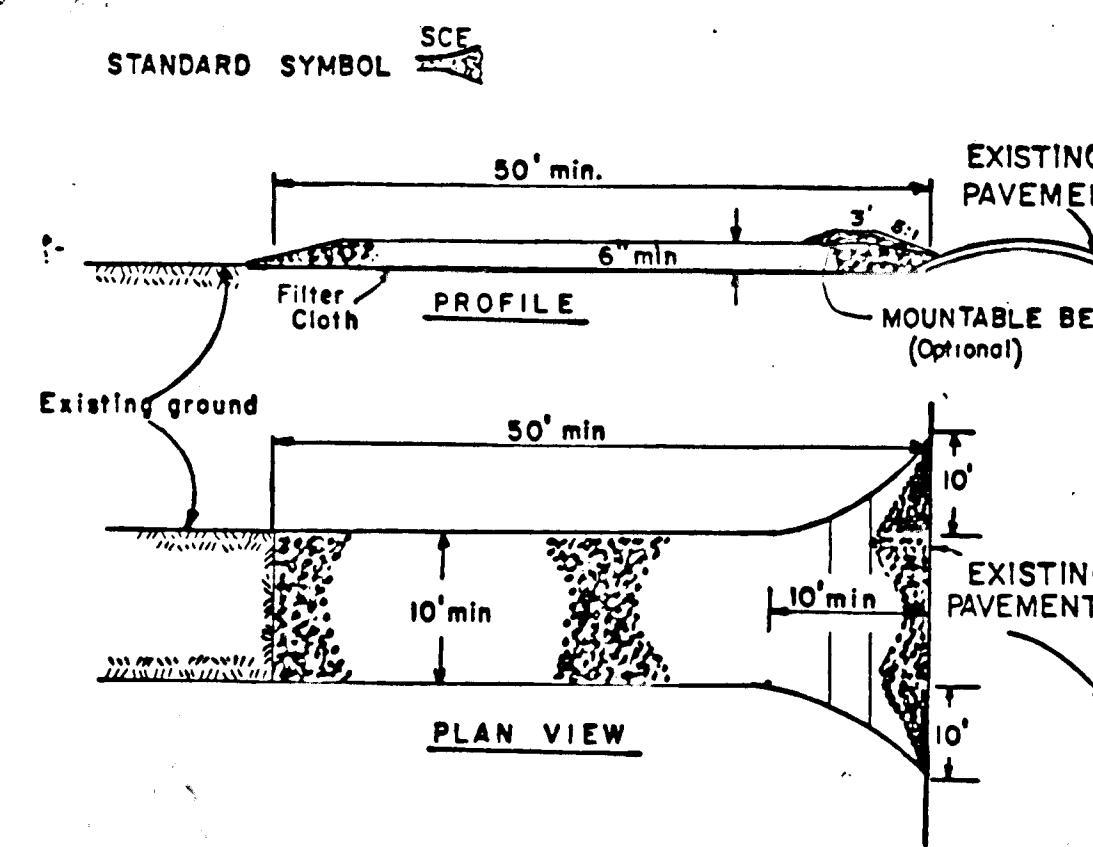
OPTION: A one foot layer of 2" stone may be placed on the upstream side of the riprap in place of the embedded filter cloth.

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. The fill material for the embankment shall be free of roots and other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
3. All cut and fill slopes shall be 2:1 or flatter.
4. The stone used in the outlet shall be small riprap 4"-8" along with a 1' thickness of 2" aggregate placed on the up-grade side on the small riprap on embedded filter cloth in the riprap.
5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to the design depth of the trap.
6. The structure shall be inspected after each rain and repairs made as needed.
7. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

Maximum Drainage Area: 5 Acres

STONE OUTLET SEDIMENT TRAP

NOT TO SCALE



1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

ENGINEER'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF ENGINEER
7/18/91
DATE

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

SIGNATURE OF DEVELOPER
7/18/91
DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

7/3/91
DATE

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: 7/3/91
DATE

DEPARTMENT OF PLANNING AND ZONING
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

9/6/91
DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF ENGINEERING

9-3-91
DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF HIGHWAYS

8/2/91
DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS

CHIEF, LAND DEVELOPMENT DIVISION

SEDIMENT CONTROL NOTES AND DETAILS

MT. HEBRON

SECTION 20 PHASE II

LOTS 32-51

2ND ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

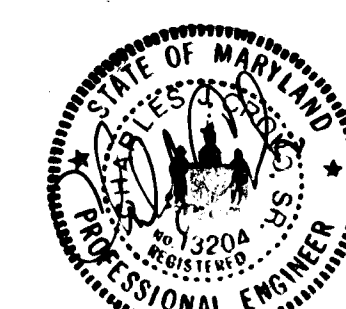
JULY 18, 1971 SCALE AS SHOWN

SHEET 5 OF 9

FISHER, COLLINS & CARTER, INC.

LAND SURVEYORS
SUITE 100, 9171 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043
(301) 461-2855

OWNER AND DEVELOPER
MT. HEBRON INC.
2106 MT. HEBRON DRIVE
ELLICOTT CITY, MARYLAND 21043



AS SHOWN
7-26-95